



Cambridge International AS & A Level

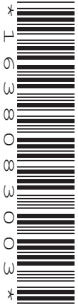
PSYCHOLOGY

9990/42

Paper 4 Specialist Options: Application

May/June 2021

1 hour 30 minutes



You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed)

INSTRUCTIONS

- Answer **four** questions in total:
 - Answer questions from **two** options.
 - Section A: answer **two** questions.
 - Section B: answer **one** question.
 - Section C: answer **one** question.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.

INFORMATION

- The total mark for this paper is 60.
- The number of marks for each question or part question is shown in brackets [].

This document has **8** pages. Any blank pages are indicated.

Section A

You must answer **two** questions from this section.
Answer all the parts for the two questions you choose.

Psychology and abnormality

1 Three comments about electro-convulsive therapy (ECT):

'It was the best thing that my wife could have had at that time; a good decision by the doctors after drugs had failed.'

'It was a positive experience; worked well for my schizophrenia.'

'I was able to go home after five months of inpatient stay as a result of ECT, after years of unsuccessful psychological treatment.'

- (a) Outline the procedure of electro-convulsive therapy (ECT). [2]
- (b) (i) Outline **one** biochemical treatment for schizophrenia. [2]
- (ii) Give **one** advantage of this biochemical treatment for schizophrenia. [2]
- (c) Outline **two** psychological treatments for schizophrenia. [4]
- (d) Discuss the strengths and weaknesses of ECT as a treatment for schizophrenia. You should include a conclusion in your answer. [5]

Psychology and consumer behaviour

2 Newspaper headline: Your brain goes shopping.

You go shopping and you see a product. By the time you decided to buy it, some brain regions already knew what you were buying and how much it cost. These brain regions are the neural predictors of purchases, studied by Knutson et al. (2007).

- (a) Identify **two** brain regions Knutson et al. found to be predictors of purchases. [2]
- (b) Outline the novel 'SHOP' task used when each participant had their brain scanned. [4]
- (c) (i) Suggest **one** reason why the findings of this study can be generalised. [2]
- (ii) Suggest **one** reason why the findings of this study cannot be generalised. [2]
- (d) Discuss the advantages and disadvantages of using brain scans to gather data about consumer decision-making. You should include a conclusion in your answer. [5]

Psychology and health

3

The UAB pain behaviour scale

This pain scale is administered by an observer of a person who is experiencing pain. One of the categories used by the observer is shown in Fig. 3.1.

Name:	
Rater:	

	DATE: M T W T F S S M T W T F S S M T W T F S S																																																																		
1. Vocal Complaints: Verbal	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="padding: 2px;">None</td> <td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td> </tr> <tr> <td style="padding: 2px;">Occasional</td> <td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td><td>½</td> </tr> <tr> <td style="padding: 2px;">Frequent</td> <td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td> </tr> </table>	None	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Occasional	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	Frequent	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
None	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																																														
Occasional	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½																																														
Frequent	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																														

Fig. 3.1 An extract from a version of the UAB scale

- (a) Identify **two** categories included in the UAB scale, other than 'vocal complaints: verbal'. [2]
- (b) (i) Explain what makes the UAB scale in Fig. 3.1 a longitudinal measure. [2]
- (ii) Explain the usefulness of a longitudinal measure in relation to pain. [2]
- (c) Suggest **two** ways in which pain can be assessed using a self-report questionnaire. [4]
- (d) Discuss the advantages and disadvantages of pain measures that are observed independently of the person who is experiencing the pain. You should include a conclusion in your answer. [5]

Psychology and organisations

- 4 Heifetz (1997) proposes a 'modern' theory of adaptive leadership, and suggests that 'getting on the balcony' to see the whole organisation is more effective than seeing a specific part of one work process.



Fig. 4.1 'getting on the balcony'

- (a) Explain **one** principle from adaptive leadership, other than 'getting on the balcony'. [2]
- (b) (i) Explain what is meant by the reductionism versus holism debate. [2]
- (ii) Suggest how adaptive leadership shows holism rather than reductionism. [2]
- (c) Suggest **two** ways in which adaptive leadership differs from 'traditional' leadership. [4]
- (d) Discuss the advantages and disadvantages of adaptive leadership. You should include a conclusion in your answer. [5]

Section B

You must answer **one** question from this section.

Psychology and abnormality

- 5 Cognitive-behavioural therapy (CBT) can be used to treat obsessive-compulsive disorder (OCD).
- (a) Design a study to test gender differences in effectiveness of CBT administered by telephone for OCD. [10]
- (b) Explain the psychological and methodological evidence on which your study is based. [8]

Psychology and consumer behaviour

- 6 There are several ways to close a sale, including reciprocity and authority.
- (a) Design a study to investigate which is the **most** successful way to close a sale when selling a computer. [10]
- (b) Explain the psychological and methodological evidence on which your study is based. [8]

Psychology and health

- 7 The style of a practitioner's clothing, the way they dress, can influence what patients think of them.
- (a) Design a study gathering qualitative data to investigate why patients prefer one practitioner style of dress to another. [10]
- (b) Explain the psychological and methodological evidence on which your study is based. [8]

Psychology and organisations

- 8 A machine in your factory has been sabotaged. You know who is responsible and want to find the reason for this unacceptable behaviour.
- (a) Design a study using an interview to investigate the reason for sabotaging the machine. [10]
- (b) Explain the psychological and methodological evidence on which your study is based. [8]

Section C

You must answer **one** question from this section.

Psychology and abnormality

- 9 *'Even though Charles was just one child, Rapoport's case study of Charles' obsessive-compulsive disorder (OCD) can be generalised to everyone.'*

To what extent do you agree with this statement? Use examples of research you have studied to support your answer. [12]

Psychology and consumer behaviour

- 10 *'The findings of experiments of consumer behaviour using eye-tracking have no value because they lack ecological validity.'*

To what extent do you agree with this statement? Use examples of research you have studied to support your answer. [12]

Psychology and health

- 11 *'If there is any doubt about making a correct diagnosis, a medical practitioner should always decide that an ill person is healthy.'*

To what extent do you agree with this statement? Use examples of research you have studied to support your answer. [12]

Psychology and organisations

- 12 *'Organisational commitment can be measured simply by looking at attendance and absenteeism.'*

To what extent do you agree with this statement? Use examples of research you have studied to support your answer. [12]

BLANK PAGE

BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which itself is a department of the University of Cambridge.